

Division 3. Air Resources Board

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Chapter 9. Off-Road Vehicles and Engines Pollution Control Devices

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Article 4.5. Off-Road Large Spark-Ignition Engines

**§ 2435. Defects Warranty Requirements for 2001 and Later Off-Road Large Spark-Ignition Engines.**

(a) Applicability. This section applies to new 2001 and later model year off-road large spark-ignition engines with engine displacement greater than 1.0 liter that are certified to the applicable emission standards pursuant to Section 2433(b). The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser. The use of alternative fuels must not void the warranties on any engine certified to use such fuel. 2002 and later model year off-road LSI engines with engine displacement less than or equal to 1.0 liter must comply with the applicable warranty requirements set forth in the California Code of Regulations, Title 13, Section 2405.

(b) General Emissions Warranty Coverage. The manufacturer of each off-road large spark-ignition engine must warrant to the ultimate purchaser and each subsequent purchaser that the engine is:

(1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the Air Resources Board pursuant to its authority in Chapters 1 and 2, Part 5, Division 26 of the Health and Safety Code; and

(2) Free from defects in materials and workmanship which cause the failure of a warranted part to be identical in all material respects to the part as described in the engine manufacturer's application for certification for a period of:

(A) 2 years or 1,500 hours, whichever occurs first, for 2001-2003 model year certified engines having engine displacement greater than 1.0 liter.

(B) 3 years or 2,500 hours, whichever occurs first, for 2004 and later model year engines having engine displacement greater than 1.0 liter.

(3) Free from defects in materials and workmanship which cause the failure of a high-cost warranted part to be identical in all material respects to the part as described in the engine manufacturer's application for certification for 2004 and later model year engines having engine displacements greater than 1.0 liter, for a period of five years or 3,500 hours of operation, whichever occurs first.

(A) Each manufacturer shall identify in its application for certification the "high-priced" warranted parts which (i) are included on the Board's "Emission Warranty Parts List" as last amended February 22, 1985, incorporated herein by reference, and (ii) have an individual replacement cost, at the time of certification, exceeding the cost limit defined in subsection (B). The replacement cost shall include the cost of the part, labor and standard diagnosis. The costs shall be those of the highest-cost metropolitan area of California.

(B) The dollar value of a high cost part shall be based on the following formula:

$$\text{Cost Limit}_n = \$300 * (\text{CPI}_{n-2} / 118.3)$$

where,

Cost Limit<sub>n</sub> is the cost limit for the applicable model year of the engine rounded to the nearest ten dollars.

n is the model year of the new engines.

n-2 is the calendar year two years prior to the model year of the new engines.

CPI= is the annual average nationwide urban consumer price index published by the United States Bureau of Labor Statistics.

(C) The cost limit shall be reviewed annually by the Executive Officer. The highest-cost metropolitan area in California shall be identified by the Executive Officer for use in this subsection. If a manufacturer seeks certification of an engine before the applicable annual average CPI is available, the cost limit shall be calculated using the average of the monthly nationwide urban CPI figures for the most recent twelve month period for which figures have been published by the United States Bureau of Labor Statistics.

(D) Each manufacturer shall submit to the Executive Officer the documentation used to identify the "high-priced" warranted parts required in this subsection. The documentation shall include the estimated retail parts costs, labor rates in dollars per hour, and the labor hours necessary to diagnosis and replace the parts.

(4) In the absence of a device to measure hours of use, the engine must be warranted for a period of the years noted above in subsections (2) and (3). If a device to measure hours is used, the engine must be warranted for the number of hours or the number of years noted above in subsections (2) and (3), whichever occurs first.

(c) The warranty on emissions-related parts must be interpreted as follows:

(1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions required by Subsection (e) must be warranted for the warranty period defined in Subsection (b)(2) and (b)(3). If any such part fails during the period of warranty coverage, it must be repaired or replaced by the engine manufacturer

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according to Subsection (4) below. Any such part repaired or replaced under the warranty must be warranted for the remaining warranty period.

(2) Any warranted part that is scheduled only for regular inspection in the written instructions required by Subsection (e) must be warranted for the warranty period defined in Subsection (b)(2) and (b)(3). A statement in such written instructions to the effect of "repair or replace as necessary" must not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for the remaining warranty period.

(3) Any warranted part that is scheduled for replacement as required maintenance in the written instructions required by Subsection (e) must be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part must be repaired or replaced by the engine manufacturer according to Subsection (4) below. Any such part repaired or replaced under warranty must be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under the warranty provisions of this article must be performed at no charge to the owner at a warranty station.

(5) Notwithstanding the provisions of Subsection (4) above, warranty services or repairs must be provided at all manufacturer distribution centers that are franchised to service the subject engines.

(6) The owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

(7) The engine manufacturer must be liable for damages to other engine components proximately caused by a failure under warranty of any warranted part.

(8) Throughout the engine's warranty period defined in Subsection (b)(2) and (b)(3), the engine manufacturer must maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

(9) Any replacement part, as defined in Section 1900(b)(13), Title 13, may be used in the performance of any maintenance or repairs and must be provided without charge to the owner. It is not necessary for replacement parts to be the same brand or by the same manufacturer as the original part sold with the engine. Such use must not reduce the warranty obligations of the engine manufacturer.

(10) Add-on or modified parts, as defined in Section 1900(b)(1) and (b)(10), Title 13, that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts will, at the discretion of the engine manufacturer, be grounds for disallowing a warranty claim made in accordance with this article. The engine manufacturer must not be liable under this article to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

(11) The Executive Officer may request and, in such case, the engine manufacturer must provide, any documents that describe that manufacturer's warranty procedures or policies.

(d) Each manufacturer must include a copy of the following emission warranty parts list with each new engine, using those portions of the list applicable to the engine.

(1) Fuel Metering System

(A) Fuel injection system.

(B) Air/fuel ratio feedback and control system.

(C) Carburetor system (internal parts and/or pressure regulator or fuel mixer or injection system).

(D) Cold start enrichment system.

(2) Air Induction System

(A) Intake manifold or air intake system.

(B) Air mass sensor assembly.

(C) Turbocharger/supercharger systems.

(3) Exhaust Gas Recirculation (EGR) System

(A) EGR valve body, and carburetor spacer if applicable.

(B) EGR rate feedback and control system.

(4) Air Injection System

(A) Air pump or pulse valve.

(B) Valves affecting distribution of flow.

(C) Distribution manifold.

(5) Catalyst or Thermal Reactor System

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- (A) Catalytic converter.
- (B) Thermal reactor.
- (C) Exhaust manifold.
- (6) Positive Crankcase Ventilation (PCV) System.

- (A) PCV Valve.
- (B) Oil Filler Cap.
- (7) Ignition Control System
- (A) Engine Control Module (ECM).
- (B) Ignition module(s).

- (8) Miscellaneous items Used in Above Systems

- (A) Vacuum, temperature, and time sensitive valves and switches.
- (B) Sensors used for electronic controls.

(C) Hoses, belts, connectors, assemblies, clamps, fittings, tubing, sealing gaskets or devices, and mounting hardware.

- (D) Pulleys, belts and idlers.

(e) Each manufacturer must furnish with each new engine written instructions for the maintenance and use of the engine by the owner. The instructions must be consistent with this article and applicable regulations contained herein.

(f) Each manufacturer must submit the documents required by Subsections (d) and (e) with the manufacturer's preliminary application for engine certification for approval by the Executive Officer. Approval by the Executive Officer of the documents required by Subsections (d) and (e) must be a condition of certification. The Executive Officer must approve or disapprove the documents required by Subsections (d) and (e) within 90 days of the date such documents are received from the manufacturer. Any disapproval must be accompanied by a statement of the reasons therefor. In the event of disapproval, the manufacturer may file for an adjudicative hearing under Title 17, California Code of Regulation, Division 3, Chapter 1, Subchapter 1.25 to review the decision of the Executive Officer.

(g) In the application, each manufacturer must include a statement concerning proper maintenance of the engine to maximize emissions performance. The statement must include, but not be limited to, information on air filter care and replacement schedule, proper fueling and fuel mixing, engine maintenance, and a maintenance schedule to ensure that the owner returns to a servicing center to check for deposits, debris build- up, etc.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code. Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

**REFERENCE**